X_4 denotes an amino acid residue at position 4 of said motif and is selected from the group consisting of Ala, Cys, Asp, Glu, Gly, Ser, Thr and Tyr; and

wherein said mutant receptor comprises a seventh transmembrane domain with a carboxy terminal end;

at least one point mutation at a position in said amino acid motif;

[such that] wherein upon interaction with a ligand to modulate a signal transduction pathway in a cell, a signal generated by said mutant receptor is greater than a signal generated upon interaction of said ligand with a wild type G protein-coupled receptor.

Q2

Q3

8. (Amended) The receptor of claim 1, [comprising an] wherein said wild type G protein coupled receptor is IL8A receptor.

Q4

11. (Amended) The receptor of claim 1 [comprising], wherein said wild type G protein coupled receptor is a human receptor.

12. (Amended) The receptor of claim 11 , wherein said wild type G protein coupled receptor is selected from the group consisting of human galanin-1 receptor, somatastatin receptor type I, somatastatin receptor type II, somatastatin receptor type III, and human nociceptin receptor.

13. (Amended) The receptor of claim 12, [which] wherein said wild type G protein coupled receptor is human galanin-1 receptor.

14. (Amended) The receptor of claim 13, comprising an amino acid sequence LAYSNSSVNPIIYAFLSEN**[**[FRK**R**]**]** (FRK**R**)YKQV (SEQ ID NO:1) wherein said mutant amino acid motif within said sequence is **[**[FRK**R**]**]** (FRK**R**).